

# Converting Colors

XYZ(16.4012, 8.4015, 3.1935)

Have a look what the booklet for  
XYZ(16.4012, 8.4015, 3.1935)  
contains.

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# Color

**XYZ(16.4100, 8.4050,  
3.2400)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	A7002D
RGB	167, 0, 45
RGB Percent	65%, 0%, 18%
CMY	0.3451, 0.9999, 0.8235
CMYK	0.00, 1.00, 0.73, 0.35
HSL	344°, 100%, 33%
HSV	344°, 100%, 65%
XYZ	16.4100, 8.4050, 3.2400
YIQ	55.0630, 85.0870, 49.3990

# Conversions

## Conversions Part 2

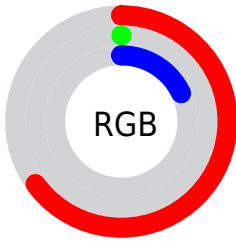
<b>Format</b>	<b>Color</b>
<b>RYB</b>	167, 0, 45
Decimal	10944557
CIELab	34.81, 59.40, 25.63
CIElCh	35, 64.691, 23.342
Yxy	8.4050, 0.5849, 0.2996
Android (android.graphics.Color)	4289134637 (0xFFA7002D)
YUV	55.0630, -4.9611, 98.1687
Hunter-Lab	28.9914, 50.3015, 13.6679

# Details

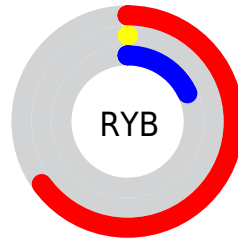
The XYZ color **16.4100, 8.4050, 3.2400** is a dark color, and the websafe version is hex **990033**. A complement of this color would be **17.3337, 29.0433, 23.1143**, and the grayscale version is **3.6399, 3.8294, 4.1702**.

A 20% lighter version of the original color is **36.8124, 22.7040, 12.1149**, and **6.0634, 3.1258, 0.2838** is the 20% darker color. If you saturate the color by 10%, you get **16.4094, 8.4047, 3.2378**, and if you desaturate by 10%, it is **16.8761, 8.9054, 4.7268**.

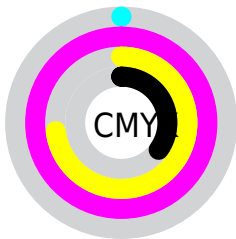
# Distribution



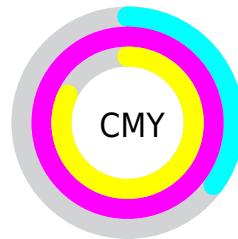
- Red (65%)
- Green (0%)
- Blue (18%)



- Red (65%)
- Yellow (0%)
- Blue (18%)



- Cyan (0%)
- Magenta (100%)
- Yellow (73%)
- Black (35%)




- Cyan (35%)
- Magenta (100%)
- Yellow (82%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 16.4100, 8.4050, 3.2400 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.


Similar to the brightness gradients but the following saturation gradients show a change of the XYZ color 16.4100, 8.4050, 3.2400 by changing the saturation by 10% instead.





 16.4100, 8.4050,  
3.2400


 16.4100, 8.4050,  
3.2400


224.9722,  
178.8750, 139.3610


 9.9074, 4.3552,  
1.2184


 36.8603, 22.7487,  
12.2151


 5.3994, 1.8742,  
0.0000

 51.5387, 33.8113,  
20.0058


 2.5206, 0.5328,  
0.0000

 69.6730, 47.9803,  
30.5565

 0.9057, 0.0000,  
0.0000

 91.6288, 65.6401,  
44.2860

 0.0000, 0.0000,  
0.0000

 117.7712, 87.1751,  
61.6126

 148.4657,

112.9696, 82.9549

184.0775,  
143.4081, 108.7316

16.4100, 8.4050,  
3.2400

16.4100, 8.4050,  
3.2400

16.4094, 8.4047,  
3.2378

16.8761, 8.9054,  
4.7268

17.5788, 9.7619,  
6.6539

18.5904, 11.1110,  
9.0691

19.9451, 13.0142,  
12.0054

21.6722, 15.5241,  
15.4927

■ 23.7981, 18.6869,  
19.5585

■ 26.3465, 22.5445,  
24.2283

■ 29.3391, 27.1349,  
29.5260

■ 32.7964, 32.4939,  
35.4741

# Harmonies

## Analogous

The Analogous color harmony consists of three colors that are next to each other on the color wheel.



17.2841, 8.4050, 11.7091



16.4100, 8.4050, 3.2400



13.0041, 8.4050, 0.5681

# Triad

The Triadic color harmony groups three colors that are evenly spaced from another and form a triangle on the color wheel.



16.4100, 8.4050, 3.2400



3.5493, 8.4050, 1.5998



7.1958, 8.4050, 47.6670

# Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



16.4100, 8.4050, 3.2400



17.3337, 29.0433, 23.1143

# Split Complementary

Split-complementary colors differ from the complementary color scheme. The scheme consists of three colors, the original color and two neighbors of the complement color.



4.4639, 8.4050, 36.9508



16.4100, 8.4050, 3.2400



2.8187, 8.4050, 6.9966

# Square

The Square scheme is like the rectangle color scheme, but the four colors are evenly spaced on the color wheel.



16.4100, 8.4050, 3.2400



5.4994, 8.4050, 0.0437



3.0926, 8.4050, 19.7634



11.1345, 8.4050, 43.2371



# Rectangle

The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



16.4100, 8.4050, 3.2400



10.1945, 8.4050, 0.0000



3.0926, 8.4050, 19.7634



6.1265, 8.4050, 45.5534

# Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



16.4102, 8.4055, 3.2401



46.9085, 39.9543, 42.8930



14.6783, 6.7617, 37.0904



10.0661, 8.2862, 8.8156



80.6108, 84.8088, 92.3568



14.7206, 15.4872, 16.8656



# Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



16.4102, 8.4055, 3.2401



29.3144, 15.0228, 5.4081



16.5735, 9.4898, 0.9591



7.6110, 7.5743, 8.2688



12.5748, 6.4387, 2.5727



0.3268, 0.1650, 0.1724



# Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



16.4102, 8.4055, 3.2401



29.3144, 15.0228, 5.4081



15.0679, 18.9752, 39.4273



7.6110, 7.5743, 8.2688



12.5748, 6.4387, 2.5727



0.3268, 0.1650, 0.1724



# Previews

## White Background



This preview shows how the XYZ color 16.4100, 8.4050, 3.2400 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

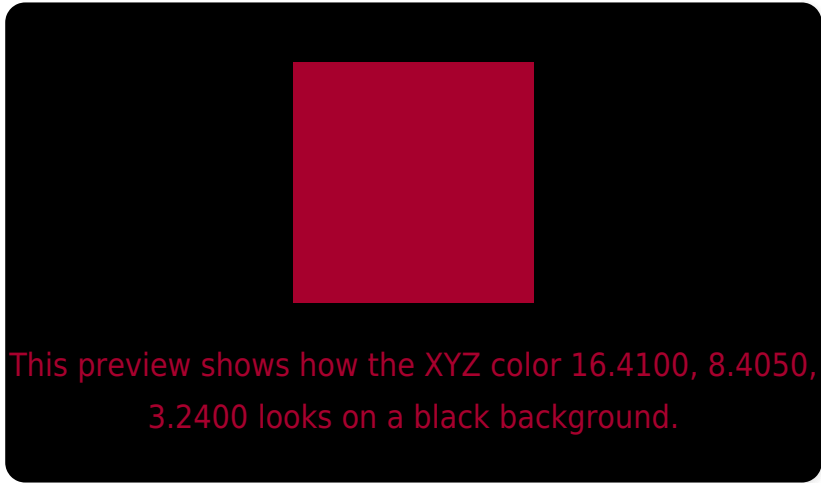
Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass



# Black Background



## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

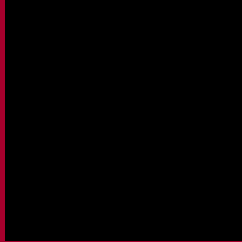
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

If you want to check with other color combinations, try the [Color Contrast Checker](#).

**XYZ 16.4100, 8.4050, 3.2400**

## **Background**



This preview shows how black text looks on a background with the XYZ color 16.4100, 8.4050, 3.2400.



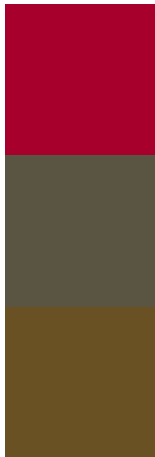
This preview shows how white text looks on a background with the XYZ color 16.4100, 8.4050,



# Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

## Dichromacy



### Original Color

16.4100, 8.4050, 3.2400

### Protanopia

8.4781, 9.0759, 6.6152

### Deuteranopia

9.0866, 9.0155, 2.9303



## Tritanopia

16.0148, 8.5687, 1.1906

# Trichromacy



## Original Color

16.4100, 8.4050, 3.2400

## Protanomaly

9.5798, 6.8057, 4.9464

## Deuteranomaly

10.4963, 7.1917, 2.7544

## Tritanomaly

16.0210, 8.4165, 1.6999

# Monochromacy



## Original Color

16.4100, 8.4050, 3.2400

## Achromatopsia

3.6313, 3.8204, 4.1605

## Achromatomaly

6.0224, 3.9279, 3.5727

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 16.4100, 8.4050, 3.2400 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color `rgb(167, 0, 45)` looks like.

```
.text, #text, p{  
    color:rgb(167, 0, 45)  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel rgb(167, 0, 45) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(167, 0, 45) }
```

## Border

The CSS property to change the border of an element to XYZ 16.4100, 8.4050, 3.2400 is called "border". The border property can be set on classes, ids or directly on the HTML element.

This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(167, 0, 45) }
```



If only the border color should be changed use the property border-color.

```
.border{ border-color:rgb(167, 0, 45) }
```

If you want to add a box shadow in that color use:

Here you see how a box with a 4 pixel rgb(167, 0, 45) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(167, 0, 45); -webkit-box-  
shadow:4px 4px 4px 4px rgb(167, 0, 45);  
box-shadow:4px 4px 4px 4px rgb(167, 0, 45)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 16.4100, 8.4050, 3.2400 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(167, 0, 45) }
```

If only the background color should be changed can be used:

```
.background{ background-color: rgb(167, 0,  
45) }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).

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